

AMENDMENTS TO THE SPECIFICATION

Please amend the Specification as follows, note that the paragraph numbers correspond with the paragraph numbers of the original application, not the paragraph numbers listed in the published application:

Replace paragraphs [0023], [0025], [0027], [0029], [0048], [0049], [0052], and [0057] with the following replacement paragraphs:

[0023] As alluded to, a non-compliant tube or conduit 20 is generally provided as a means of conveying material between the pressure applicator and an emplaced cannula 30. The components may be connected via luer fitting [[52]] 56 or otherwise. Specific details regarding [[and]] advantages of utilizing a non-compliant delivery conduit are set forth in U.S. Patent No. 6,348,055.

[0025] As provided in further detail in Fig. 2, cannula 30 may be provided as part of a cannula/stylet or a cannula/obturator combination 60 includes a cannula with handle portions 64[[44]] and a tubular body [[48]]. Fig. 2 shows combination 60 with the inventive system 70 in order that it may be appreciated that such components may be provided in packaged combination in order to provide a kit 80 as one variation of the invention.

[0027] With such tools adapted for precutaneous bone access, a surgeon initially identifies a landmark with the aid of fluoroscopy [[or]] or other imaging technique. Next, an injection is given to anesthetize the skin where insertion will occur. Local anesthesia will typically also be administered to the target site as well. After sufficient time has passed to effectively anesthetize the skin, an incision is made through the skin with a scalpel. A combined stylet/cannula combination is then inserted through the incision and advanced using a translation motion with

no torquing, until the tip of the stylet abuts the hard bone tissue to be traversed. Once contact has been made, the cannula tube is then grasped with a pair of hemostats and fluoroscopy/imaging is used to assess the position of the cannula/stylet with regards to the vertebra. The hemostats are used to allow the hands of the user to be removed from [[form]] the field in which the imaging radiation will be applied. With the aid of medical imaging (possibly applied along various trajectories), the cannula/stylet are positioned with the desired orientation for passing into the body of the bone.

[0029] Once the orientation of the stylet and cannula (the latter having been advanced over the stylet), has been satisfactorily set, the fluoroscopy/imaging is discontinued, the hemostats hemostats are removed and the operator carefully grasps the cannula/stylet being careful not to alter the orientation. The stylet with beveled tip is then removed and replaced by the stylet with self-tapping threads. Grasping the combination handle, and optionally the cannula tube, the operator then proceeds to both push translationally and torque the combination handle to begin [[the]] threading the stylet end into hard bone tissue.

[0048] By virtue of a seal between the body/barrel section 124 of the pressure driver and a container 140 in which implant material 110 resides, the implant material is drawn into the expanding drive chamber section as illustrated. While a threaded interface 142 [[140]] between the container and barrel elements is shown, other means of securing and forming a pressure tight seal between the members may be employed. For example, various clamping, sliding or other arrangements may be employed.

[0049] In any case, upon advancing the piston (whether after a partial actuator stroke, or a full one), sleeve 130 advances as well. A seal member 132 such as an O-ring may be provided to form or enhance [[134]] the manner in which a distal end 134 of the sleeve closes off the barrel section from the container section to prevent backflow thereto – thus ensuring intended delivery of implant material. Of course, other sealing approaches may be employed as well, such as conical-shaped sections that push into each other or yet other approaches.

[0052] In any case, these variations of the invention differ from those discussed above in that container 150 serves both as the pump body and offers reservoir 110 space. In this case, sleeve 152 slides within container 151[[150]] guided at a proximal end by wall 154. Of course, additional guide members may be provided distally.

[0057] The variation of the invention in Fig. 8 offers additional optional features. Namely, the driver 176 is provided in the form of a handle with first and second arms 180, 182 to provide leverage to a cannula/style combination. Stylet 184 includes a knob top 186. Upon emplacement of the cannula (aided by any of various tip features at the end of the stylet – such as threading treading, point, etc.), the stylet is removed from the driver to allow implant material delivery through cannula 192 [[188]] once a plug 190 is inserted as shown. The plug may include an O-ring to enhance or form a seal with the driver body. Alternatively, or additionally, a valve or internal seal may be provided to close-off the space left open by removing the stylet.